

ADDITIONAL NOTES ON THE GENUS *CORNUTIA*. IX

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CORNUTIA GRANDIFOLIA (Schlecht. & Cham.) Schau.

Additional bibliography: Mold., *Phytologia* 56: 315--316. 1984.

Additional citations: NICARAGUA: Nueva Segovia;

W. D. Stevens 3355 (Ld). COSTA RICA: Alajuela: *Liesner & Judziewicz* 14968 (Ld); A. Smith 185 (W--2086104). Puntarenas: *Dryer* 1508 (E--2889939). San José: *Todzia* 1843 (Au, N). PANAMA: Canal Zone: *Sullivan* 602 (E--2889929). Coclé: *Allen* 1637 (W--1820159), 1795 (W--1820224); *Folsom & Kauke* 2775 (Ld); *Hammel* 3884 (Ld); *Huft* 1915 (Ld). Herrera: *Hammel* 5285 (E--2889961). Veraguas: *Hammel* 4333 (Ld). CULTIVATED: Florida: *Gillis* 8464 (Ba--387253).

CORNUTIA GRANDIFOLIA var. *INTERMEDIA* Mold.

Additional bibliography: Mold., *Phytologia* 41: 124--127. 1978; F. C. Seymour, *Phytol. Mem.* 1: 243. 1980; Mold., *Phytol. Mem.* 2: 61, 71, 75, 78, 81, 83, 352, & 545. 1980; Mold., *Phytologia* 56: 316. 1984.

Recent collectors refer to this plant as a shrub, 2--4 m. tall, or a tree, 10--"25" [*Reveal & Balogh* 4964] m. tall, and have found it growing on weedy roadsides, among stream edge vegetation and in adjacent forests, in cutover areas of moist subtropical forests, and in clay oxysol of cow pastures associated with *Paspalum*, at 600--1500 m. altitude, in anthesis in February, May, and June, and in fruit in August. Poole and his associates refer to it as "infrequent". The corollas are said to have been "purple" on *Dorantes & Acosta* 2147bis and *Poole & al.* 1533, "lilac" on *Guzmán & al.* 608, "blue" on *D'Arcy* 5273 and *Reveal & Balogh* 4964, and "violet" on *Wedel* 2173.

Seymour (1980) cites *Robbins* 6178 and *Zelaya* 2319 from Matagalpa, Nicaragua.

Material of this taxon has been misidentified and distributed in some herbaria as *C. pyramidata* L. On the other hand, the *Bartlett & Lasser* 16329, distributed as *C. grandifolia* var. *intermedia*, seems actually to be var. *normalis* (Kuntze) Mold.

Additional citations: MEXICO: Veracruz: *Dorantes & Acosta* 2147bis (Ld); *Poole, Pollock, & Levy* 1533 (Au). NICARAGUA: Granada: *Guzmán, Castro, & Montiel* 608 (Ld). COSTA RICA: Alajuela: *Taylor & Taylor* 11700 (W--2906323). PANAMA: Bocas del Toro: *Wedel* 2173 (W--1920359). Coclé: *Reveal & Balogh* 4964 (E--2889919). Veraguas: *D'Arcy* 5273 (Ld).

CORNUTIA GRANDIFOLIA var. *NORMALIS* (Kuntze) Mold.

Additional bibliography: Mold., *Phytologia* 41: 124 & 125. 1978; Mold., *Phytol. Mem.* 2: 61, 81, 83, 85, 352, & 545. 1980; Mold., *Phytologia* 56: 316. 1984.

Recent collectors describe this plant as a shrub, 1--4 m. tall, the flowers "visited by many bees", and have encountered it along roadsides and in disturbed and waste areas, at 150--900 m. altitude, in anthesis in April, May, and July, and in fruit in May. The corollas

are said to have been "blue" on Antonio 3971 and Folsom & Edwards 3386, "lavender" on Sytsma & Andersson 4646, and "purple" on Sullivan 413.

Material of this taxon has been misidentified and distributed in some herbaria as var. *intermedia* Mold. On the other hand, the Allen 1637 & 1795, distributed as var. *normalis*, seem to represent the typical form of the species instead.

Additional citations: MEXICO: Veracruz: Sousa 2748 (Me--112582). COSTA RICA: Guanacaste: Rowlee & Rowlee 111 (It). Puntarenas: Rowlee & Rowlee 178 (It). San Jose: Skutch 2642 (W--1642564). Province undetermined: Weston, Weston, & Weston 1859 (N). PANAMA: Canal Zone: Rowlee & Rowlee 449 (It); Tyson 1874a (W--2512633). Panamá: Bartlett & Lasser 16329 (Mi). Veraguas: Antonio 3971 (Ld); Folsom & Edwards 3386 (Ld); Sytsma & Andersson 4646 (Ld); Sullivan 413 (Ld).

CORNUTIA GRANDIFOLIA var. PURPUSI Mold.

Emended synonymy: *Hosta longifolia* Humb. ex Spreng. in L., Syst. Veg., ed. 16, 1: 39. 1825.

Additional bibliography: Walp., Repert. Bot. Syst. 4: 81. 1845; Mold., Phytologia 41: 125. 1978; Mold., Phytol. Mem. 2: 62 & 545. 1980.

CORNUTIA GRANDIFOLIA f. QUADRANGULARIS (Ørst. & Mold.) Mold.

Additional bibliography: Mold., Phytologia 41: 125. 1978; Hocking, Excerpt. Bot. A.33: 5 & 165. 1979; Mold., Phytol. Mem. 2: 81. 395, & 545. 1980.

CORNUTIA GRANDIFOLIA var. STORKII Mold.

Additional bibliography: Mold., Phytologia 41: 125--126. 1978; Mold., Phytol. Mem. 2: 81 & 545. 1980.

CORNUTIA JAMAICENSIS Mold.

Additional bibliography: C. D. Adams, Flow. Pl. Jamaic. 636. 1972; Mold., Phytologia 41: 126. 1978; Mold., Phytol. Mem. 2: 93 & 545. 1980.

CORNUTIA LATIFOLIA (H.B.K.) Mold.

Emended synonymy: *Hosta latifolia* Humb. ex Spreng. in L., Syst. Veg., ed. 16, 1: 39. 1825.

Additional & emended bibliography: G. Don in Sweet, Hort. Brit., ed. 3, 551. 1839; Walp., Repert. Bot. Syst. 4: 81. 1845; Mold., Phytologia 41: 126. 1978; Mold., Phytol. Mem. 2: 62, 71, 74, 352, 412, & 545. 1980; Mold., Phytologia 52: 116. 1982; C. L. & A. A. Lundell, Wrightia 8: 119 & 159. 1983; Raj, Rev. Palaeobot. Palyn. 39: 355, 371, 394, 406, & 412, pl. 11, fig. 4. 1983; Mold., Phytologia 56: 316. 1984.

Illustrations: Raj, Rev. Palaeobot. Palyn. 39: 412. 1983.

Recent collectors have found this plant growing at lagoons and in "acahual of 2 years of *Acalypha diversifolia* derived from a forest of *Robinsoniella mirandae*", at an altitude of 1.8--3 m., in a region of "3995.6 mm. precipitation, 24.9° C. temperature", in full an-

thesis in August, reporting for it the local name, "lengua de vaca".

The *Gentle 186* and *Lundell & Lundell 7888*, distributed as and cited by me in previous installments of these notes as *C. latifolia*, seem on further examination actually to represent *C. pyramidata* var. *isthmica* Mold. instead.

Additional citations: MEXICO: Oaxaca: *Dioscoreas 3407* (Me--104715), *3578* (Me--103432). Veracruz: R. M. King *992* (W--2397524). GUATEMALA: Quezaltenango: *Skutch 1326* (W--1644114). BELIZE: *Wiley 90* (Ld).

CORNUTIA LATIFOLIA f. *ALBA* Mold.

Additional bibliography: Mold., *Phytologia* 41: 126. 1978; Mold., *Phytol. Mem.* 2: 62 & 545. 1980.

CORNUTIA LILACINA Mold.

Additional bibliography: Mold., *Phytologia* 41: 125, 126, & 130. 1978; Mold., *Phytol. Mem.* 2: 71, 75, 77, 78, 352, & 546. 1980; F. C. Seymour, *Phytol. Mem.* 1: 243. 1980; Mold., *Phytologia* 50: 243 (1982), 52: 116 (1982), 54: 299 & 231 (1983), and 56: 316. 1984.

Recent collectors describe this plant as a shrub, growing in pinelands, the leaves lighter in color beneath, the midrib reddish, and the fruit black. They found it in fruit in June. The corollas are described as having been "purple-blue" on *Herb. Sec. Bot. 171* and "bluish-purple" on *Howard & al. 514*. Seymour (1980) cites *Salas 58* from Nicaragua.

The *Molina R. 3082* and *Steiermark 30338 & 37427*, distributed as typical *C. lilacina*, actually represent its var. *velutina* Mold., while *Molina R. 5222* is *C. pyramidata* var. *isthmica* Mold.

Additional citations: HONDURAS: Province undetermined: *Howard, Briggs, Kamb, Lane, & Ritland 514* [Los Dragos] (W--2988363). EL SALVADOR: San Salvador: *Herb. Sec. Bot. 171* (Me--172261).

CORNUTIA LILACINA var. *VELUTINA* Mold.

Additional bibliography: Mold., *Phytologia* 41: 125, 126, & 130. 1978; Mold., *Phytol. Mem.* 2: 71, 75, 77, 78, 352, & 546. 1980; Mold., *Phytologia* 50: 243 (1982), 52: 116 (1982), 54: 229 & 231 (1983), and 56: 316. 1984.

Recent collectors describe this plant as a shrub or small tree, 2--4 m. tall, or a slender, rounded tree, 4--10 m. tall, the leaves firmly membranous, dull rich-green above, pale-green beneath, pungently malodorous, with a gray-white or dull-rose midrib. They have found it growing in alluvial plain fields, along roadsides and disturbed roadsides, in gallery forests, and on slopes of open brushy semi-plains, from sealevel to 1500 m. altitude, in flower in March and June to September, in fruit in August and September. Allen reports it only "occasional" or "infrequent" in El Salvador, but Stevens found it "common on inland side of ridges" in Nicaragua. The vernacular name, "zapulote morada", is recorded for the plant.

The corollas are said to have been "blue" on *Allen & Severen 6923* and *Moreno 1886 & 3082*, "blue-violet" on *Croat 42504*, "purple" on *Guzman & al. 379*, *Moreno 1289 & 2996*, and *Stevens 2945, 9744, & 9932*, "violet" on *Neill 2447*, "deep-violet" on *Allen 7073*, and

"lilac-lavender with 2 buff-yellow spots below the center, the center deeper purple" on *Steyermark* 37427.

Material of this taxon has been misidentified and distributed in some herbaria as typical *C. lilacina* Mold., *C. grandifolia* (Schlecht. & Cham.) Schau., and *C. pyramidata* L. It is possible that *Croat* 42504 may actually represent a form of *C. grandifolia*.

Additional citations: MEXICO: Veracruz: *Gentry, Lott, & Bot. Class* 32580 (Ld). GUATEMALA: Chiquimula: *Steyermark* 30338 (W--1842172). San Marcos: *Steyermark* 37427 (W--2022057). HONDURAS: Copán: *Croat* 42504 (Ld). Morazán: *Molina R.* 3082 (W--2022482). EL SALVADOR: Sonsonate: *Allen* 7073 (W--2296043); *Allen & Severn* 6923 (W--2296011). NICARAGUA: Chontales: *Guzman, Castro, & Montiel* 379 (Ld). Estelí: *Moreno* 1289 (Ld), 1886 (Ld); *W. D. Stevens* 9932 (Ld). Granada: *Atwood & Neill* AN.79 (Ln--266880). Madriz: *Moreno* 2996 (Ld). Managua: *Chaves* 376 (W--1637370); *W. D. Stevens* 2945 (Ld). Rivas: *Neill* 2447 (Ld); *W. D. Stevens* 9744 (Ld).

CORNUTIA MICROCALYCINA Pavon & Mold.

Additional bibliography: Mold., *Phytologia* 41: 124--128. 1978; Mukherjee & Chanda, *Trans. Bose Res. Inst.* 41: 41. 1978; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 22. 1979; Mold., *Phytologia* 47: 143. 1980; Mold., *Phytol. Mem.* 2: 82, 83, 107, 128, 133, 352, 395, & 546. 1980; Mold., *Phytologia* 52: 120. 1982.

Recent collectors describe this plant as a shrub or tree. 1.5--10 m. tall, the stems square, the leaves dark-green above, grayish-green beneath, the inflorescence axis dark-green to purple, and the fruit at first green, later maturing purple. They have encountered the species along roadsides, "in forest patches and secondary areas", in the transition zone between dry and wet tropical forest, in river-side vegetation, in open areas, dry tropical forests, and "in full sun in bottom pastures except for tree border along streams", at 20--1650 m. altitude, in flower in February, May to August, and December, and in fruit in July and August.

The corollas are described as having been "blue" on *Aristeguieta* 3255 and *Foster & Wright* 8052, "blue with a yellow spot on the lip" on *Folsom* 3460, "blue with yellow in the throat of the large lobe" on *Liesner & al.* 8325, "blue-purple" on *Dodson & Gentry* 12485, "purple" on *Berti & Peña S.* 176-181, "lavender" on *Knapp* 5966, "lilac" on *Forero & al.* 45 and *Øllgaard & Balslev* 7529, and "violet" on *Escobar* 1359 and *Madison & al.* 4816. Escobar describes the fruit as "white"!

Material of this species has been misidentified and distributed in some herbaria as *Cornutia odorata* var. *calvescens* Mold., *C. pyramidata* L., and even *Citharexylum* sp.

Additional citations: PANAMA: *Folsom* 3460 (Ld); *Knapp* 5966 (E--2940930). COLOMBIA: Chocó: *Forero, Jaramillo, Espina Z., & Palacios H.* 7188 (Ld); *Forero, Jaramillo, Pabén, Espina Z., & Pitt-eres* 2345 (N). VENEZUELA: Barinas: *Aristeguieta* 3255 (W--2882107); *Berti & Peña S.* 176-981 (W--2977400). Falcón/Lara: *Liesner, González, & Wingfield* 8325 (Ld, N). Mérida: *Berti* 1111 (W--2976563). EC-UADOR: Carchi: *Madison, Plowman, Kennedy, & Besse* 4816 (Ac, W--

2850631). El Oro: Escobar 1359 (Ld). Guayas: Asplund 5734 (W--2223731); Dodson & Gentry 12485 (Ld); Øllgaard & Balslev 7529 (Ac, Ac). PERU: Pasco: Foster & Wright 8052 (N).

CORNUTIA MICROCALYCINA var. *ANOMALA* Mold.

Additional bibliography: Mold., *Phytologia* 41: 125, 127, & 128. 1978; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 22. 1979; Mold., *Phytol. Mem.* 2: 83, 107, 128, & 546. 1980.

CORNUTIA MICROCALYCINA var. *PULVERULENTA* Mold.

Additional bibliography: Mold., *Phytologia* 41: 125, 127, & 128. 1978; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 22. 1979; Mold., *Phytol. Mem.* 2: 83, 107, 128, & 546. 1980; Mold., *Phytologia* 52: 120. 1982.

Recent collectors describe this plant as an aromatic, coarse, much-branched shrub or shrubby tree, 3--12 m. tall, the trunk to 20 cm. in diameter at breast height, the primary branches often arching, the secondary ones erect until too heavy, the leaves opposite, light-green above, pale beneath, the fruit at first green, later "white, juicy, the seed angular, verrucose, nigrescent-purple". They have encountered it along roadsides, in rainforests with coffee and cocoa plantations, and very tall forests being partially cleared of the understory for the planting of coffee, at 50--410 m. altitude, in both flower and fruit in June and October.

The corollas are said to have been "violet" in color on Holm-Nielsen & al. 2801, "lavender" on *Juncosa* 1142, "blue" on Davidse & al. 18519, and "deep-blue" on Camp E.3681.

Material of this taxon has been misidentified and distributed in some herbaria as *Aegiphila* sp.

Additional citations: PANAMA: Coiba Island: Antonio 2287 (Ld). COLOMBIA: Chocó: *Juncosa* 1142 (Ld). VENEZUELA: Zulia: Davidse, González, & León 18519 (Ld, N). ECUADOR: Carchi: Boeke 844 (N). Esmeraldas: *Játiva* 470 (W--2962102), 749 (W--2962103); Little 96778 (W--1854905). Guayas/Cañar/Chimborazo/Bolívar: Camp E.3681 (W--2057117). Los Ríos: Holm-Nielsen, Jeppesen, Løjtnant, & Øllgaard 2801 (Eu--55245, Ut--352581b).

CORNUTIA OBOVATA Urb.

Additional bibliography: Urb., *Symb. Antil.* 4: 537. 1911; Mold., *Phytologia* 41: 128. 1978; J. T. & R. Kartesz, *Syn. Checklist Vasc. Fl.* 2: 466. 1980; Mold., *Phytol. Mem.* 2: 97 & 546. 1980; Liogier & Martorell, *Fl. Puerto Rico* 152 & 311. 1982.

Recent collectors describe this plant as a small tree, 5--7 m. tall, or large shrub, the trunk 7.5--15 cm. in diameter at breast height, the bark gray, with many long fissures, and the leaves very thick and leathery, those on sterile shoots mostly apically sharp-toothed. Liogier & Martorell (1983) refer to it as "Rare and local in moist limestone and in forests at lower and middle elevations". Collectors encountered it at 300 m. altitude, in flower in June, and record the vernacular names, "capa" and "jiguerilla". The corollas are said to have been "blue" on Sargent 410 and "purple" on Little 13012.

Material of this species has been misidentified and distributed in some herbaria as *C. pyramidata* L.

Additional citations: PUERTO RICO: *Little* 13012 (N), 13500 (N); *F. H. Sargent* 410 (W--1780946); *Woodbury* s.n. [Nov. 19, 1960] (N, W--2942315), s.n. [La Torrecilla, June 2, 1961] (N).

CORNUTIA ODORATA (Poepp. & Endl.) Poepp.

Additional bibliography: Walp., *Repert. Bot. Syst.* 4: 80--81. 1845; Bodley, *Lab. Anthrop. Wash. St. Univ. Rep. Invest.* 55: 20. 1978; Mold., *Phytologia* 41: 127--129. 1978; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 22. 1979; Mold., *Phytol. Mem.* 2: 107, 115, 128, 130, 133, 352, & 546. 1980.

Additional synonymy: *Cornutia odorata* (Poepp. & Endl.) "Poepp. ex Schau." apud López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 22. 1979.

Recent collectors refer to this plant as a shrub or treelet, 3--9 m. tall, with subsucculent branches, the calyx buff, and the fruit "orange" or "dark-purple when mature". They have found it growing in thickets and also cultivated (or, at least, in cultivated ground), at 450 m. altitude, in anthesis in April and December, and in both flower and fruit in October.

The corollas are described as having been "violet" in color on *Ayala* 513 and *Torres* 815 and "the tube purple, the limb blue-purple" on *Plowman* 7508.

The vernacular name, "toé shingure", is reported for the species in Peru, where, according to *Plowman*, the leaves are mixed with those of *Banisteriopsis caapi* to make a stronger hallucinogen.

Material of this species (*Cornutia odorata*) has been misidentified and distributed in some herbaria as *Aegiphila elegans* Mold.

Additional citations: ECUADOR: Esmeraldas: *Mexia* 8497 (W--1707484). PERU: Loreto: *Asplund* 12975 (W--2224793); *Ayala* 513 (Ld); *J. Torres* 815 (Ld). San Martín: *Plowman* 7504 (N).

CORNUTIA ODORATA var. *CALVESCENS* Mold.

Additional bibliography: Mold., *Phytologia* 41: 128--129. 1978; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 22. 1979; Mold., *Phytol. Mem.* 2: 107, 115, & 546. 1980.

Recent collectors have encountered this plant at 400 m. altitude, in flower in September. The corollas are said to have been "purple" on the González & Ortega collection cited below.

The *Berti* 1111, distributed as this taxon in some herbaria, seems actually to be *C. microcalycina* Pavon & Mold.

Additional citations: COLOMBIA: Caldas: *Sneidern* 6061 (W--2056578). VENEZUELA: Miranda: *González & Ortega* 1389 (Ld); *Steyermark* 90054 (W--2430205). Zulia: *Steyermark* 99904 (W--2622371).

CORNUTIA ODORATA var. *COLOMBIANA* Mold.

Additional bibliography: Mold., *Phytologia* 41: 128 & 129. 1978; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 22. 1979; Mold., *Phytol. Mem.* 2: 107 & 546. 1980.

Additional citations: COLOMBIA: Caldas: *Haught* 2130 (W--1742377). Cundinamarca: *Haught* 6066 (W--1709862). Huila: *Little* 7929 (W--

CORNUTIA PUBESCENS Gaertn. f.

Additional bibliography: Mold., *Phytologia* 41: 129. 1978; Mold., *Phytol. Mem.* 2: 126, 352, & 546. 1980.

Additional citations: FRENCH GUIANA: *Granville 5092* (Ld); *Herb. Maire s.n.* (P).

CORNUTIA PYRAMIDATA L.

Additional synonymy: *Cornutia pyramidata* Mold., *Phytologia* 54: 242, in syn. 1983.

Additional & emended bibliography: Poir. in Lam., *Tabl. Encycl. Méth. Bot.* 3: pl. 541. 1819; G. Don in Sweet, *Hort. Brit.*, ed. 3, 551. 1839; Walp., *Repert. Bot. Syst.* 4: 80--81 & 125. 1845; Bocq. in Baill., *Rec. Obs. Bot.* 3: 234. 1863; Briq. in Engl. & Prantl, *Nat. Pflanzenfam.*, ed. 1, 4 (3a): 169. 1895; Millsp., *Field Co. umb. Mus. Publ. Bot.* 1: 316. 1896; Urb., *Symb. Antil.* 4: 537. 1911; Mold., *Suppl. List Comm. Vern. Names* 13 & 16. 1940; Savage, *Cat. Linn. Herb. Lond.* 107. 1945; Alain in León & Alain, *Fl. Cuba*, imp. 1, 4: 313 & 314, fig. 135. 1957; Serbanescu-Jitariu & Mitroiu, *Act. Bot. Hort. Bucurest.* 1972-73: 110, 111, & 116, pl. 2, fig. 6. 1973; Fournet, *Fl. illust. Phan. Guad. Mart.* 1412. 1978; Mold., *Phytologia* 41: 124 & 129--130. 1978; J. T. & R. Kartesz, *Syn. Checklist Vasc. Fl.* 2: 466. 1980; Mold., *Phytol. Mem.* 2: 62, 71, 74. 89, 93, 95, 97, 100, 102, 103, 124, 352, 395, & 546. 1980; F. C. Seymour, *Phytol. Mem.* 1: 243. 1980; Liogier & Martorell, *Fl. Puerto Rico* 152 & 311. 1982; Mold., *Phytologia* 52: 117 & 230. 1982; Rees & Lipp, *New Pl. Sources Drugs* 251. 1982; Mold., *Phytologia* 54: 242. 1983; Raj, *Rev. Palaeobot. Palyn.* 39: 355, 371, & 394. 1983; Mold., *Phytologia* 56: 316. 1984.

Additional & emended illustrations: Poir. in Lam., *Tabl. Encycl. Méth. Bot.* 3: pl. 541. 1819; Alain in León & Alain, *Fl. Cuba*, imp. 1, 4: 313, fig. 135. 1957; Serbanescu-Jitariu & Mitroiu, *Act. Bot. Hort. Bucurest.* 1972-73: 111, pl. 2, fig. 6. 1973.

Recent collectors describe this plant as a single-stemmed, much-branched, most attractive shrub or small tree, 2--10 m. tall, with fruit that is black when mature. They have found it growing in secondary bush, on serpentine formation rocks, along roadsides with "farm-side vegetation", on coralliferous limestone riverbanks, in serpentine charrascal, in deciduous seasonal forests, along railroad tracks, in basalt regions, savanna land and lake areas, and at the edges of thickets in alluvial soil, from sealevel to 400 m. altitude, in flower from April to July and September to December, in fruit in January, July, September, and December. Jimenez reports it "fairly common" in the Dominican Republic. The vernacular names, "bois cassave", "bois coral", and "bois pou-poule", are listed for it.

The corollas are described as having been "blue" on *Beard 1244* and *Howard & Howard 9909*, "bluish-purple" on *Webster 3877*, "purplish-blue" on *Mejía & Zanoni 6796 & 6937*, "purple" on *Allard & Allard 13875*, "lilac" on *Morton & Acuña 3006*, "lavender-blue" on *Philcox & Kalloo 7220*, and "mauve" on *Beard 1052*.

Rees & Lipp (1982) cite *Beard 502* from St. Lucia. The *Allard & Allard 13875* collection exhibits unusually small leaves, but is actually only in beginning anthesis.

Serbanescu-Jitariu & Mitroiu (1973), on the basis of *Herb. Univ.*

Cluj 147204, describe the pollen of this species as follows: "subprolat; 4--5-colporat; văzut apical 70,2--75,4 mu in diam., din profil înalt 44,2--83,2 mu, lat 33,8--70,2 mu. Polenul scuturat din antere și văzut cu ochiul liber, este galben-deschis, in apă la microscop este galben-portocaliu, iar in cloralhidrat galben-verzui. Sporoderma de 3,9 mu grosime este crassissexinată; în sect. optică exina prezintă o structură pilat-reticulată (retipilată); ochiurile (brochi) rețelei variate ca formă și mărime se micșorează in jurul colpilor. Colpii lungi (4/5 din raza microsporilor) cu suprafața fin ornată, sînt brusc îngustați spre poli și ascuțiți la capete."

Seymour (1980) cites *Seymour 6378* from Nueva Segovia, Nicaragua, but this record seems questionable -- the species is not otherwise known from Nicaragua.

The *Calzada 383 & 397*, distributed as *C. pyramidata*, actually are *C. grandifolia* (Schlecht. & Cham.) Schau., while *Taylor & Taylor 11700* is *C. grandifolia* var. *intermedia* Mold., *Allen 7073*, *Allen & Severen 6923*, and *Chaves 376* are *C. lilacina* var. *velutina* Mold., *Dodson & Gentry 12485* is *C. microcalycina* Pavon & Mold., *Sargent 410* is *C. obovata* Urb., and *Gentle 186* and *Webster & Lynch 17672* are *C. pyramidata* var. *isthmica* Mold.

Additional citations: CUBA: Oriente: *Ekman 3425* (W--2113463); *López Figueiras 1251* (W--2227022); *Morton & Acuña 3006* (W--1782780); *Webster 3877* (W--2284062). HISPANIOLA: Dominican Republic: *Allard & Allard 13875* (W); *Canela L. s.n.* [19-V-1957] (N, W--2989718); *Ekman H.10893* (W--1710853), *12464* (W--1711446); *Howard & Howard 9909* (W--2111107); *J. J. Jiménez 8561* (Ld); *Mejía & Zanoni 6937* (N). LEEWARD ISLANDS: Guadeloupe: *Questel 2379* (W--1881887), *4953* (W--2453680); *Stehlé 467* (W--1558751). WINDWARD ISLANDS: Grenada: *Beard 1244* (W--1883643). Martinique: *Stehlé 1050* (W--1712113), *5399* (W--1880436). St. Lucia: *Beard 1052* (W--1882203). TRINIDAD & TOBAGO: Trinidad: *Philcox & Kalloo 7220* (N). CULTIVATED: Dominican Republic: *Mejía & Zanoni 6796* (N).

CORNUTIA PYRAMIDATA var. ISTHMICA Mold.

Additional synonymy: *Cornutia pyramidata* var. *isthmica* Mold., *Phytologia* 54: 242 in syn. 1983.

Additional bibliography: Mold., *Phytologia* 41: 124 & 130. 1978; Mold., *Phytol. Mem.* 2: 62, 71, 74, 395, & 546. 1980; Mold., *Phytologia* 52: 47 (1982), 54: 242 (1983), and 56: 316. 1984.

Recent collectors refer to this plant as a shrub or tree, 1--6.5 m. tall, the trunk sometimes to 15 cm. in diameter at breast height, and the fruit "blue". They have encountered it in potreros with *Sida*, *Hyptis verticillata*, and *Cassia*, in scrubby woods on limestone, at the edges of high bush zone along ravines, on flat terrain of savannas with dark-red clay soil, in dooryards, and along streets, at 90--200 m. altitude, in flower from June to October, and in fruit in October and November. The Lundells refer to it as "rare" in Yucatan.

The corollas are said to have been "blue" on *Molina R. 5222*, *Téllez & al. 3360*, and *Téllez & Cabrera 2490*, "bluish-purple" on *Lundell & Lundell 7888*, "purple" on *Moreno 876*, *Téllez & al. 3462*, and *Téllez & Cabrera 2792*, "bright-lilac" on *Cowan 3232*, and "dull-

violet" on Webster & Lynch 17672.

Material of this taxon has been misidentified and distributed in some herbaria as *C. grandiflora* Steud., *C. grandifolia* (Schlecht. & Cham.) Schau., *C. latifolia* (H.B.K.) Mold., and *C. lilacina* Mold.

Additional & emended citations: MEXICO: Quintana Roo: Cabrera & Cortez 366 (N); Moreno 876 (Me--300481); Téllez & Cabrera 2490 (Ld), 2792 (N); Téllez, Cabrera, & Rico 3360 (N), 3462 (N); Webster & Lynch 17672 (Me--286493). Tabasco: Cowan & Magaña in C. Cowan 3232 (N). Yucatán: Lundell & Lundell 7888 (W--1888275). GUATEMALA: El Peten: Harmon & Fuentes 5820 (W--2923350, Ws); Ortiz 1330 (W--2925228). BELIZE: Gentle 186 (F--662519, Mi, N, W--1585899, W--1636835); Wiley 430 (Ld). HONDURAS: Cortés: Molina R. 5222 (W--2189005).

CORNUTIA PYRAMIDATA var. *ISTHMICA* f. *ALBIDA* Mold.

Additional bibliography: Mold., *Phytologia* 41: 130. 1978; Mold., *Phytol. Mem.* 2: 71, 395, & 546. 1980.

CORNUTIA PYRAMIDATA f. *SERRATA* Mold., *Phytologia* 52: 230. 1982.

Bibliography: Mold., *Phytologia* 52: 230. 1982.

Citations: LEEWARD ISLANDS: Guadeloupe: Questel 2388 (E--photo of type, W--1881896--type.

CORNUTIA THYRSOIDEA Banks & Mold.

Additional bibliography: Mold., *Phytologia* 41: 130. 1978; Hocking, *Excerpt. Bot. A.33*: 91. 1979; Mold., *Phytol. Mem.* 2: 93, 352, & 546. 1980.

ADDITIONAL NOTES ON THE GENUS *LIPPIA*. XVIII

Harold N. Moldenke

Since the publication of the last previous notes on this genus so many hundreds of herbarium specimens have come to hand from collectors in the field and from herbarium curators and so much new bibliographic information has become available that another in my ongoing series of notes has become justified. Herbarium acronyms are those used in all previous papers and most recently explained in *Phytologia Memoirs* 2: 463--469 with a supplement in *Phytologia* 50: 268.

LIPPIA Houst.

Additional bibliography: P. Mill., *Gard. Dict.*, ed. 8, *Lantana* no. 8. 1768; Willd. in L., *Sp. Pl.*, ed. 4, 3 (2): 3. 1802; Reichenb., *Deutsch. Bot. [Repert. Herb. Nom.]* 108. 1841; Brongn., *Enum. Gen. Pl.*, ed. 1, 65. 1843; D. Dietr., *Syn. Pl.* 3: 371, 596--600, 609, & 610. 1843; Walp., *Repert. Bot. Syst.* 4: [3], 33, 34, 41--57, 64, 69, & 134. 1845; Lindl., *Veget. Kingd.*, ed. 1, 663 &